

Claim Amendments

Claims 1-44 (canceled)

45. (Previously presented) A repeater for a wireless network comprising:
 - a first transceiver operable to receive data transmitted on a first frequency channel;
 - a second transceiver connected to the first transceiver via a wired link, the second transceiver operable to transmit the data on a second frequency channel.
46. (Previously presented) The repeater of claim 45 wherein the first and second transceivers each includes a transmitter and a receiver.
47. (Previously presented) The repeater of claim 45 wherein the second transceiver is further operable to receive data on the second channel and the first transceiver is further operable to transmit data on the first channel, such that the repeater is operable to function in a bi-directional manner.
48. (Previously presented) The repeater of claim 46 wherein the transmitters and receivers of the first and second transceivers are frequency programmable.
49. (Previously presented) The repeater of claim 45 wherein the first and second frequency channels are either within a 5GHz or a 2.4GHz frequency band.
50. (Previously presented) A wireless network comprising:
 - a source device that transmits data on a first frequency channel;

a repeater having first and second transceivers connected via a wired link, the first transceiver receiving the data from the source device on the first frequency channel, the second transceiver transmitting the data on a second frequency channel.

51. (Previously presented) The wireless network of claim 50 further comprising a destination device that receives the transmitted data.

52. (Previously presented) The wireless network of claim 50 wherein the source device is coupled to a broadband data network.

53. (Previously presented) The wireless network of claim 51 wherein the network is bi-directional, such that data sent wirelessly from the destination device is received and re-transmitted to the source device by the repeater.

54. (Previously presented) The wireless network of claim 50 wherein either the first or the second transceiver operates at any given time.

55. (Previously presented) The wireless network of claim 50 wherein the data comprises video media content.

56. (Previously presented) The wireless network of claim 50 further comprising one or more additional repeaters, each having a pair of transceivers wired together to receive and re-transmit the data.

57. (Previously presented) The wireless network of claim 50 further comprising a second repeater having third and fourth transceivers, the third transceiver receiving

the data from the repeater on the second frequency channel, and the fourth transceiver re-transmitting the data on a third frequency channel.

58. (Previously presented) The wireless network of claim 57 wherein the destination device is configured to receive the data from the second repeater on the third frequency channel.

59. (Previously presented) The wireless network of claim 58 wherein the destination device comprises a media receiver connected to a display device.

60. (Previously presented) A wireless network comprising:
a source device that transmits data on a first frequency channel;
a plurality of repeaters arranged in a tree topology, each of the repeaters having an upstream transceiver to receive the data and a downstream transmitter to send the data across the wireless network, the upstream and downstream transceivers operating on different frequency channels; and
a destination device that receives the data.

61. (Previously presented) The wireless network of claim 60 wherein two or more of the repeaters are configured to receive the data from the source device on the first frequency channel.

62. (Previously presented) The wireless network of claim 60 wherein one of the plurality of repeaters re-transmits the data directly to two or more of the repeaters.

63. (Previously presented) The wireless network of claim 60 wherein the source device is coupled to a broadband data network.

64. (Previously presented) The wireless network of claim 60 wherein the upstream or downstream transceiver operates at any given time.
65. (Previously presented) The wireless network of claim 60 wherein the destination device comprises a media receiver connected to a display device.
66. (Previously presented) The wireless network of claim 60 wherein each of the transceivers includes a transmitter and a receiver.
67. (Previously presented) The wireless network of claim 60 wherein each of the repeaters is configurable to operate in a bi-directional manner.
68. (Previously presented) The wireless network of claim 66 wherein the transmitter and the receiver of each of the transceivers are frequency programmable.
69. (Previously presented) The wireless network of claim 60 wherein the first and second frequency channels are either within a 5GHz or a 2.4GHz frequency band.